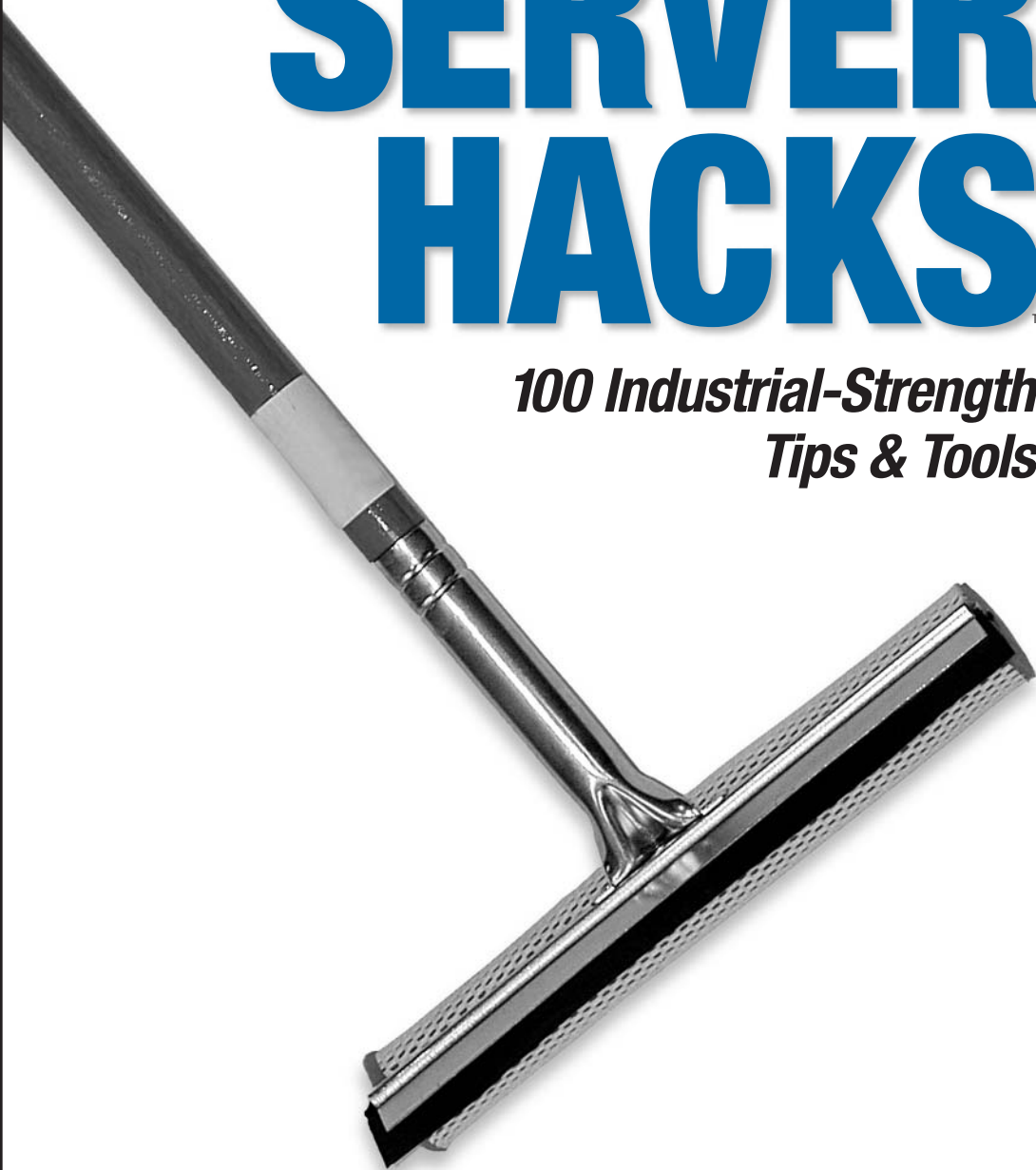


WINDOWS SERVER HACKS™

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HACK
#67

Unattended Installation of Windows Components

Here's a simple way you can add or remove system components when deploying Windows 2000 and later.

If you're responsible for administering a large number of computers, you appreciate methods of automating common administrative tasks. A need to add or remove individual system components might result from a change in corporate policy, discovery of security vulnerability, or simply a newly emerged business need. Using sneakernet for such tasks might take considerable amount of time.

Fortunately, Microsoft provides a way to accomplish this task in an unattended way. Windows 2000 and XP contain the *SYSOCMGR.EXE* file in the `%systemroot%\system32` folder. When executed, this command-line utility analyzes the content of two files: *sysoc.inf* (the existing configuration file, located in `%systemroot%\inf` folder) and a specially formatted text file (which you can give an arbitrary name) that contains a listing of components to be added or removed.

The *sysoc.inf* file is used by Windows when running the Add/Remove Programs applet in the Control Panel. Its format is typical of standard *.inf* files: it is divided into several sections, each starting with a name enclosed in square brackets. The [Components] section consists of multiple lines, one per component. Each line starts with the component name, followed by references to *.dll* and *.inf* files used during installation or uninstallation. Hide entry determines whether the component appears in Add/Remove Programs applet.

The second text file (which you need to create) can have an arbitrarily chosen name; for example, `c:\comp.txt` will do nicely. This file can be created using Notepad and should contain the [Components] section, followed by one or more lines of the following format:

```
Component_Name = On/Off
```

Here, On is used for installation and Off is used for uninstallation. For example, to remove Windows Messenger and add Faxing, the file should contain the following lines:

```
[Components]  
Msmgs=Off  
Fax=On
```

You can also install optional networking components by including the line `Netoc=On` and the additional section [NetOptionalComponents]. This section

would contain lines that refer to different networking components, such as `SimpTcp` or `wins`, like so:

```
SimpTcp=1  
wins=1
```

A value of 1 causes installation and 0 causes uninstallation. The names of the components are the same as the ones used during unattended installation of the operating system, which are documented in the *Unattended.doc* file on the Windows installation CD in the *Support\Tools* folder.

Running the Hack

Once you've created your *Comp.txt* file, you can now use *sysocmgr.exe* in unattended installation mode to add or remove Windows components. Simply run the following command:

```
SYSOCMGR.EXE /i:%windir%\inf\sysoc.inf /u:c:\comp.txt
```

Note that this approach will not work with the COM+, Distributed Transaction Coordinator, Microsoft Fax, and Windows Media Player services, because these components are not removable.

—Marcin Policht